

**STATE OF NORTH DAKOTA**  
**PUBLIC SERVICE COMMISSION**

**Aurora Wind Project, LLC**  
**345 kV Transmission Line – Williams & Mountrail**  
**Siting Application**

**Case No. PU-18-351**

**FINDINGS OF FACT, CONCLUSIONS OF LAW AND ORDER**

**May 29, 2019**

**Appearances**

Commissioners Brian Kroshus, Julie Fedorchak, and Randy Christmann.

Mollie M. Smith, Fredrikson & Byron, P.A., 200 South 6th Street, Suite 4000, Minneapolis, MN 55402, on behalf of the Applicant, Aurora Wind Project, LLC.

Zachary Pelham, Special Assistant Attorney General, North Dakota Public Service Commission.

Timothy J. Dawson, Administrative Law Judge, Office of Administrative Hearings, 2911 North 14th Street – Suite 303, Bismarck, ND 58503, as Procedural Hearing Officer.

**Preliminary Statement**

On September 28, 2018, Aurora Wind Project, LLC (Aurora Wind) filed a combined application for a Corridor Certificate and a Route Permit to construct a 345 kV electric transmission line (Transmission Line) from the proposed Aurora Wind Project to Basin Electric's Tande Substation in Mountrail County, North Dakota.

Also on September 28, 2018, in Case No. PU-18-352, Aurora Wind filed an Application for a Certificate of Site Compatibility for a wind energy conversion facility known as the Aurora Wind Farm Project to be located in Williams County, North Dakota.

On January 9, 2019, the North Dakota Public Service Commission (Commission) consolidated Case No. PU-18-351 and Case No. PU-18-352 for hearing; deemed both applications complete conditioned upon receipt within 30 days of the hearing of (1) maps showing final site plan with turbines, access roads, collector lines, transmission line structures, and all residential receptor points labeled; (2) Class III cultural resource survey reports or summaries showing areas surveyed and State Historical Society of North Dakota (SHSND) cultural site numbers recommended for avoidance; and (3) wetland delineation reports; and issued a Notice of Filings and Notice of Consolidated Hearing, scheduling a public hearing for February 25, 2019, at 9:00 a.m. at Neset Consulting Service, 6844 State Hwy 40, Tioga, ND 58852. The Notice identified the following issues to be considered:

1. Will the location and operation of the proposed facilities produce minimal adverse effects on the environment and upon the welfare of the citizens of North Dakota?
2. Are the proposed facilities compatible with the environmental preservation and the efficient use of resources?
3. Will the proposed facility locations minimize adverse human and environmental impact while ensuring continuing system reliability and integrity and ensuring that energy needs are met and fulfilled in an orderly and timely fashion?

On January 24 and 25, 2019, Aurora Wind filed (1) a residence setback waiver; (2) Mountrail County Conditional Use Permit; (3) Sound and Shadow Flicker Summary (with updated receptor maps); (4) Archaeological Summary Report; (5) Letter to SHPO; (6) Unanticipated Discovery Plan; (7) Historic-Age Non-Archaeological Resource Summary Report; (8) Wetlands and Waterbodies Technical Memorandum; (9) Avian Use Study Report: August 2017 – July 2018; (10) 2018 Acoustic Bat Monitoring Survey Summary; (11) Dakota Skipper Habitat Evaluation Report; and (12) Correspondence with U.S. Fish and Wildlife Service .

On February 22, 2019, Aurora Wind filed (1) signed Certification Relating to Order Provisions – Transmission Facility Siting, with accompanying Tree and Shrub Mitigation Specifications; (2) additional SHPO correspondence; (3) additional North Dakota Game, and Fish Department correspondence and meeting notes; (4) North Dakota Department of Trust Lands (NDDTL) correspondence; (5) correspondence from Senator Rust; and (6) a sound analysis report.

On February 25, 2019, a public hearing was held as scheduled.

Having allowed all interested persons an opportunity to be heard and having heard, reviewed, and considered all testimony and evidence presented, the Commission makes its:

### **Findings of Fact**

1. Aurora Wind is a Delaware limited liability company and is wholly owned by Tradewind Energy, Inc.
2. Aurora Wind is authorized to do business in the State of North Dakota, as evidenced by the Certificate of Good Standing issued by the North Dakota Secretary of State on October 1, 2018 (Case No. PU-18-354).

### Size, Type, and Preferred Location of Facility

3. Aurora Wind proposes to construct, own, and operate approximately 20 miles of a 345 kV electric transmission line and associated facilities in Williams and Mountrail Counties.
4. The Transmission Line would convey power from the planned Aurora Wind Farm Project substation to the point of interconnection to the grid at the existing Basin Electric Power Cooperative Tande 345-kV Substation located in Mountrail County.
5. The proposed route for the Transmission Line is approximately 20 miles in length, with approximately 17 miles in Williams County and approximately three miles in Mountrail County. With a couple of exceptions, the proposed corridor is a 150-foot wide survey area generally centered on the right-of-way acquired for the Project.
6. After filing the application, Aurora Wind widened the proposed corridor and shifted the Project route slightly to the west in Sections 19 and 30, Township 158 N, Range 96 W, so that the Transmission Line right-of-way will be at least 500 feet from the residence identified as ID-7. The final proposed corridor is shown on Hearing Exhibit 8.
7. The Project will be constructed using steel monopole structures, wood H-frame structures, or steel H-frame structures, with a span of between 600 and 900 feet, depending on final engineering design. Tangent structures will be wood or steel, will be directly embedded into the ground, with an overall foundation diameter of approximately four to 10 feet, and embedded length of approximately 15 to 35 feet. The average aboveground height of the structures will range from 80 to 150 feet depending on final engineering design.
8. The Project will be constructed in compliance with the National Electrical Safety Code (NESC).
9. Within the Aurora Wind Farm project area, the wind energy leases and easement agreements authorize construction of the Transmission Line. Outside of the Aurora Wind Farm project area, Aurora Wind has secured separate transmission line easement agreements to the Tande Substation except for pending easements on school trust land managed by NDDTL.
10. Aurora Wind estimates the Transmission Line project cost to be \$15 million and intends commercial operations to begin once the Aurora Wind Farm Project is complete, no later than the end of 2020.

### Study of Preferred Location

11. Aurora Wind coordinated with the following federal, state, and local departments, agencies, and entities:

- a. Federal – United States Department of the Air Force – Minot Air Force Base North Dakota; United States Department of the Army Corps of Engineers , North Dakota Regulatory Office; Federal Aviation Administration ; United States Department of Commerce – National Telecommunications and Information Administration; USFWS.
  - b. State – North Dakota Aeronautics Commission; North Dakota Department of Health; North Dakota Department of Trust Lands; North Dakota Game and Fish Department; North Dakota State Water Commission; North Dakota Industrial Commission – Oil and Gas Division; North Dakota Department of Transportation; North Dakota Geological Survey; State Historical Society of North Dakota; and
  - c. Local – Mountrail County; Williams County; City of Tioga, North Dakota.
12. Agency consultations and comments are summarized in the application, exhibits, and testimony presented at the public hearing.
13. Aurora Wind has obtained a conditional use permit for the Transmission Line from both Williams County and Mountrail County. Aurora Wind will comply with applicable county zoning ordinance requirements.
14. Aurora Wind analyzed an area for the project that is approximately one mile wide (0.5 mile on either side of the project route) and encompasses approximately 12,915 acres. (Study Area)
15. Aurora Wind performed a desktop evaluation of the study area for soils, land use, wetlands and waterbodies, trees and shrubs, and protected species and critical habitats.
16. Aurora Wind conducted a Class I literature review and a Class III cultural resources pedestrian survey. The SHSND has concurred with Aurora Wind's determination of "No Significant Sites Affected".
17. Aurora Wind conducted natural resource field surveys within the proposed corridor, which gathered information on land use and vegetation, wetlands and waterbodies, trees and shrubs, and wildlife, including protected species and critical habitats.
18. Aurora Wind conducted avian use studies, raptor nest surveys, an eagle risk assessment, a sharp-tailed grouse lek survey; acoustic bat study; whooping crane habitat assessment; Class II architectural history investigation; and Dakota Skipper habitat evaluation.
19. Aurora Wind consulted Native American Tribes regarding potential cultural resources.

## Siting Criteria

20. The Commission has established criteria pursuant to the North Dakota Century Code § 49-22-05.1 to guide the Commission in evaluating the suitability of granting a Certificate of Corridor Compatibility and a Route Permit. The criteria, as set forth in North Dakota Administrative Code § 69-06-08-02, are classified as Exclusion Areas, Avoidance Areas, Selection Criteria, and Policy Criteria.

21. Aurora Wind evaluated the Project with respect to the Exclusion Areas, Avoidance Areas, Selection Criteria, and Policy Criteria.

22. A transmission facility route must not be sited within an Exclusion Area. Exclusion Areas may be located within the corridor, but at no given point may such an area or areas encompass more than 50 percent of the corridor unless there is no reasonable alternative.

23. There are no Exclusion Areas identified within the Project Corridor.

24. An Avoidance Area is a geographical area that may not be considered in the routing of a transmission facility unless the applicant shows that, under the circumstances, there is no reasonable alternative. In determining whether an Avoidance Area should be designated for a transmission facility, the Commission may consider, among other things, the proposed management of adverse impacts, the orderly siting of facilities, system reliability and integrity, the efficient use of resources, and alternative routes.

25. Areas within 500 feet of an inhabited rural residence are designated as an Avoidance Area. Pursuant to North Dakota Century Code § 49-22-05.1(2), the 500-foot Avoidance Area for an inhabited rural residence may be waived by the owner of the residence in writing.

26. One inhabited residence is located within 500 feet of the proposed route. Aurora Wind has obtained a waiver from the landowner and filed a copy of the waiver with the Commission.

27. Based on the Class I and Class III studies conducted for the project, no archaeological sites recommended for National Register of Historic Places eligibility are present within the proposed corridor.

28. Aurora Wind's field surveys identified no additional Avoidance Areas within the proposed corridor.

29. In accordance with the Commission's Selection Criteria, a transmission facility may be approved only if it is determined that any significant adverse effects that will result from the location, construction, and operation of the facility as they relate to the Selection Criteria will be at an acceptable minimum, or will be managed and maintained at an acceptable minimum.

30. There are up to 10 areas along the proposed route where Aurora Wind may need to remove trees and shrubs up to 150 feet wide in order to meet NESC requirements for safe operation of the Transmission Line. Aurora Wind indicated that it will use trimming, if sufficient, rather than removal, and will minimize the width of clear cuts through wooded areas to the extent possible.

31. Aurora Wind has analyzed the impacts of the project in relation to all relevant Selection Criteria. No significant adverse impact will result from the location, construction, and operation of the project.

32. In accordance with the Commission's Policy Criteria, the Commission may give preference to an applicant that will maximize the benefits that result from the adoption of various policies designated within the Commission's Policy Criteria.

33. Aurora Wind has demonstrated its commitment to maximize the benefits of the project to meet the Commission's Policy Criteria by designing and locating the project in a manner as to maximize operational efficiency and economic benefits while minimizing project impacts.

#### Mitigation to Minimize Impact

34. Aurora Wind has agreed to certain steps to mitigate the impact of the project as indicated by its February 19, 2019 execution of the Certification Relating to Order Provisions with accompanying Tree and Shrub Mitigation Specifications, which has been filed with the Commission.

35. Aurora Wind will use best management practices to minimize impacts on ground and surface water, and to prevent soil erosion. Erosion control measures required under the National Pollution Discharge Elimination System permit and the associated Storm water Pollution Prevention Plan will be implemented. Construction of the project is not anticipated to have a significant adverse impact on surface or ground water resources or soils. Temporarily disturbed areas will be restored and reseeded.

36. The Transmission Line will be marked with bird flight diverters.

37. Aurora Wind will participate in the North Dakota One-Call Excavation Notice System.

From the foregoing Findings of Fact, the Commission now makes its:

#### Conclusions of Law

1. The Commission has jurisdiction over this proceeding under North Dakota Century Code Chapter 49-22.

2. Aurora Wind is a utility as defined in North Dakota Century Code § 49-22-03(14).

3. The project is a transmission facility as defined by North Dakota Century Code Section 49-22-03(6).
4. The application submitted by Aurora Wind meets the corridor and route evaluation criteria required by North Dakota Century Code Chapter 49-22.
5. The location, construction, and operation of the project will produce minimal adverse effects on the environment and upon the welfare of the citizens of North Dakota.
6. The location, construction, and operation of the project are compatible with environmental preservation and the efficient use of resources.
7. The project will minimize adverse human and environmental impact while ensuring continuing system reliability and integrity and ensuring that energy needs are met and fulfilled in an orderly and timely fashion.

From the foregoing Findings of Fact and Conclusions of Law, the Commission now makes its:

### **Order**

The Commission orders:

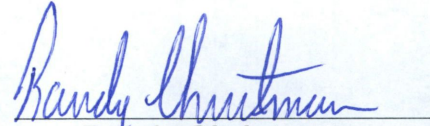
1. Aurora Wind shall construct and operate the facility in accordance with the Commission's Findings of Fact.
2. Certificate of Corridor Compatibility No. 210 is issued to Aurora Wind designating a corridor for the construction, operation, and maintenance of the project and associated facilities in Williams and Mountrail Counties, North Dakota, as identified in Hearing Exhibit 8.
3. Route Permit No. 220 is issued to Aurora Wind designating a route in Williams and Mountrail Counties, North Dakota, for the construction and operation of an approximately 20-mile 345 kV transmission line. The designated route for this purpose is as identified in Hearing Exhibit 8.
4. Inclusion of any portions of the Transmission Line right-of-way not currently under lease and/or easement in the designated route for the Project is conditioned upon Aurora Wind obtaining the requisite lease and/or easement agreements with the owners of said parcels.
5. The February 19, 2019 Certification Relating to Order Provisions – Transmission Facility Siting, with accompanying Tree and Shrub Mitigation Specifications (Hearing Exhibit No. 13) is incorporated by reference and attached to this Order. Aurora Wind is authorized to clear-cut up to 150 feet wide along the designated route in order to meet NESC requirements for safe operation of the Transmission Line.

6. To the extent, there are any conflicts or inconsistencies between Aurora Wind's Application and the Certification, the Certification provisions control.

**PUBLIC SERVICE COMMISSION**

  
Julie Fedorchak  
Commissioner

  
Brian Kroshus  
Chairman

  
Randy Christmann  
Commissioner

**PUBLIC SERVICE COMMISSION  
STATE OF NORTH DAKOTA**

**Certificate of Corridor Compatibility Number 210**

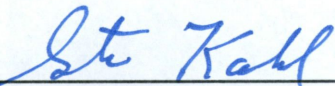
*This is to certify that the Commission has designated a transmission facility corridor for Aurora Wind Project, LLC for the construction of approximately 20 miles of 345 kV electric transmission line and associated facilities extending from the Aurora Wind Farm Project in Williams County to Basin Electric's existing 345 kV Tande Substation in Mountrail County, North Dakota.*

*This certificate is issued in accordance with the Commission's Findings of Fact, Conclusions of Law and Order dated May 29, 2019 in Case No. PU-18-351 and is subject to the conditions and limitations noted in the Order.*

*Bismarck, North Dakota, May 29, 2019.*

**ATTEST:**

**PUBLIC SERVICE COMMISSION**

  
\_\_\_\_\_  
**Interim Executive Secretary**

  
\_\_\_\_\_  
**Commissioner**

**PUBLIC SERVICE COMMISSION**  
**STATE OF NORTH DAKOTA**

**Route Permit Number 220**

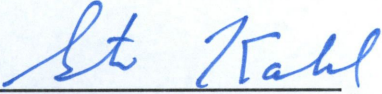
*This is to certify that the Commission has designated a route for Aurora Wind Project, LLC for the construction of approximately 20 miles of 345 kV electric transmission line and associated facilities extending from the Aurora Wind Farm Project in Williams County to Basin Electric's existing 345 kV Tande Substation in Mountrail County, North Dakota.*

*This permit is issued in accordance with the Commission's Findings of Fact, Conclusion of Law and Order dated May 29, 2019 in Case No. PU-18-351 and is subject to the conditions and limitations noted in the Order.*

*Bismarck, North Dakota, May 29, 2019.*

**ATTEST:**

**PUBLIC SERVICE COMMISSION**

  
\_\_\_\_\_  
**Interim Executive Secretary**

  
\_\_\_\_\_  
**Commissioner**

**STATE OF NORTH DAKOTA  
PUBLIC SERVICE COMMISSION**

**Aurora Wind Project, LLC  
345 kV Transmission Line – Williams and Mountrail  
Siting Application**

**Case No. PU-18-351**

**CERTIFICATION RELATING TO ORDER PROVISIONS  
TRANSMISSION FACILITY SITING**

I am Matthew F. Gilhousen, a representative of Aurora Wind Project, LLC (“Company”) with authority to bind the Company to requirements to be set forth by the Commission in its Order and I certify the following:

1. Company understands and agrees that any Certificate of Corridor Compatibility or Route Permit issued by the Commission will be subject to the conditions and criteria set forth in Chapter 49-22 of the North Dakota Century Code and Chapter 69-06-08 of the North Dakota Administrative Code, and that Company shall be responsible for compliance with this order and conditions and criteria set forth in the applicable laws and rules.
2. Company agrees to comply with the rules and regulations of all other agencies having jurisdiction over any phase of the transmission facility including all city, township, and county zoning regulations.
3. Company understands and agrees that it shall obtain all other necessary licenses and permits, and shall provide copies of all licenses and permits to the Commission prior to construction activity associated with the transmission facility that requires said license or permit.
4. Company understands and agrees that any Certificate of Corridor Compatibility or Route Permit issued by the Commission is subject to suspension or revocation and may, in an appropriate and proper case, be suspended or revoked for failure to comply with the Commission’s order, the conditions and criteria of the certificate or subsequent modification, or failure to comply with the applicable statutes, rules, regulations, standards, and permits of other state or federal agencies.
5. Company agrees to maintain records that will demonstrate that it has complied with the requirements of the Commission’s order issuing a Certificate of Corridor Compatibility or Route Permit, and that it will preserve these records for Commission inspection at any reasonable time upon reasonable notice.
6. Company understands and agrees that the authorizations granted by any Certificate of Corridor Compatibility or Route Permit issued by the Commission for

the transmission facility are subject to modification by order of the Commission if deemed necessary to protect further the public or the environment.

**Construction:**

7. Company agrees to hold a preconstruction conference prior to commencement of any construction, which must include a Company representative, its construction supervisor, and a representative of Commission Staff, to ensure that Company fully understands the conditions set forth in the Commission's order.
8. Company understands and agrees that all cultural resource mitigation plans must be submitted to the North Dakota State Historic Preservation Office and approved prior to the start of any fieldwork and construction activity in the affected area.
9. Company understands and agrees that topsoil removal will begin when the Commission's third-party construction inspector is present at the Project site to observe that topsoil is properly removed and kept segregated from subsoil until replacement occurs. Company shall establish the date and time for the Commission's third-party construction inspector's topsoil removal oversight in the preconstruction conference.
10. Company agrees to inform the Commission and the Commission's third-party construction inspector of its intent to start construction on the transmission facility prior to the commencement of construction. Once construction has started, Company shall keep the Commission and the Commission's third-party construction inspector updated on construction activities on a monthly basis.
11. Company understands and agrees that all topsoil, up to 12 inches, or topsoil to the depth of cultivation, whichever is greater, over and along trench areas where cuts will be made, must be carefully stripped and segregated from the subsoil. Any area on which excavated subsoil will be placed must also be stripped of topsoil. The stripped topsoil must not be stockpiled in natural drainages and must be protected from water erosion. Care must be taken to protect topsoil from unnecessary compaction by heavy machinery. Unless otherwise approved by the Commission, topsoil must be removed before topsoil freezes in the late fall/ early winter to the point that frost inhibits proper soil segregation. After backfilling with subsoil is completed, any excess subsoil must be placed over the excavation area, blending the grade into existing topography. Topsoil must be replaced over areas from which it was stripped only after the subsoil is replaced.
12. Company understands and agrees that all buried facility crossings of graded roads must be bored unless the responsible governing agency specifically permits Company to open cut the road.

13. Company understands and agrees that staging areas or equipment shall not be located on land owned by a person other than Company unless otherwise negotiated with landowners.
14. Company understands and agrees that if any cultural resource, paleontological site, archeological site, historical site, or grave site is discovered during construction, it must be marked, preserved and protected from further disturbances until a professional examination can be made and a report of such examination is filed with the Commission and the State Historical Society.
15. Company understands and agrees that construction must be suspended when weather conditions are such that construction activities will cause irreparable damage to roads or land, unless adequate protection measures are taken by Company.
16. Company understands and agrees that the Commission's third-party construction inspector will be allowed ~~has authority~~ to stop Project construction activities to prevent an imminent hazard from occurring before the Commission could take formal action with respect to said activities. For purposes of this provision, "imminent hazard" means a condition that presents a substantial likelihood of death, serious illness, severe personal injury, or a substantial endangerment to health, property, or the environment. Other Project construction activities would be allowed to continue in the event of a probable violation of the siting laws, siting rules, or applicable Commission Orders if, in the opinion of the Commission, construction activities are likely to result in irreparable or significant harm.

#### **Restoration and Maintenance:**

17. Company understands and agrees that it shall, as soon as practicable upon the completion of the construction of the transmission facility, restore the area affected by the activities to as near as is practicable to the condition as it existed prior to the beginning of construction.
18. Company understands and agrees that all pre-existing township and county roads and lanes used during construction must be repaired or restored to a condition that is equal to or better than the condition prior to the construction of the transmission facility and that will accommodate their previous use, and that areas used as temporary roads or working areas during construction must be restored to their original condition.
19. Company understands and agrees that reclamation, fertilization, and reseeding is to be done according to the Natural Resources Conservation Service recommendations, unless otherwise specified by the landowner and approved by the Commission.

20. Company will fulfill its obligation for reclamation and maintenance of the approved transmission facility right-of-way, transmission facility, and associated facilities continuing throughout the life of the transmission facility.
21. Company will repair all fences and gates removed or damaged during all phases of construction and operation of the transmission facility.
22. Company will repair or replace all drainage tile broken or damaged as a result of construction and operation of the transmission facility.
23. Company agrees to comply with the Tree and Shrub Mitigation Specifications, attached.
24. Company understands and agrees that it shall work with landowners and residents to mitigate any increase in television and residential radio interference that results from the construction of the transmission facility.
25. Company understands and agrees that it shall remove all waste that is a product of construction and operation, restoration, and maintenance of the site, and properly dispose of it on a regular basis.
26. Company understands and agrees that it shall provide any necessary safety measures for traffic control or to restrict public access to the transmission facility.

**Communication with Landowners and PSC:**

27. Company understands and agrees that, prior to beginning construction of the transmission facility at a location, it shall send a letter to each landowner with whom an easement was executed for that location specifying the name and phone number of the company representative who is responsible for receiving and resolving landowner issues for the life of the easement.
28. Company understands and agrees that it will file with the commission the name and phone number of the current company representative who is responsible for receiving and resolving landowner issues for the transmission facility. The company will update this information whenever there is a change to the current company representative for the life of all easements for the transmission facility.
29. Upon request, Company agrees to provide the Commission with engineering design drawings of the transmission facility prior to construction.

30. Company understands and agrees that it shall advise the Commission as soon as reasonably possible of any extraordinary events which take place at the site of the transmission facility, including injuries to any person.
31. Company agrees to report to the Commission, as soon as reasonably possible, the presence in the permit area of any critical habitat or threatened or endangered species of which Company becomes aware and which were not previously reported to the Commission.
32. Company understands and agrees that it shall inform the Commission in writing of any plans to modify the transmission facility or of any plans to modify the site plan for the transmission facility.
33. Company agrees to provide the Commission with both an electronic and a paper copy of the corridor approved by the Commission and the facility design specifications for the construction of the transmission facility showing the location of the transmission facility as built, and will provide this information within 3 months of the completion of the construction. Company also agrees to provide an electronic version of the corridor approved by the Commission and the facility design specifications for the construction of the transmission facility showing the location of the transmission facility as built that can be imported into ESRI GIS mapping software within 3 months of the completion of the construction. This electronic map data must be referenced to the North Dakota coordinate system of 1983, North and/or South zones US Survey feet (NAD 83) UTM Zone 13N or 14N feet (NAD 83), or geographic coordinate system (WGS 84) feet. The vertical data must be in the appropriate vertical datum for the coordinate system used. All submissions must specify the datum in which the data was developed.
34. Company shall notify the Commission as soon as reasonably possible if any damage, as defined by North Dakota Century Code Chapter 49-23, occurs to underground facilities during construction conducted under the certificate or permit issued in this proceeding. In the event of any damage to underground facilities, Company shall suspend construction in the vicinity of the damage until compliance with One-Call Excavation Notice System requirements under North Dakota Century Code Chapter 49-23 has been determined.

**Route Adjustments Before or During Construction:**

35. Company agrees to utilize the following procedures if Company seeks a route adjustment before or during construction of the transmission line.
36. Company will file the name and contact information for a key contact person for the purposes of notice and communication during the adjustment application.

37. **ROUTE ADJUSTMENT WITHIN DESIGNATED CORRIDOR, NO AVOIDANCE AREA AFFECTED:** Before conducting any construction activities for any adjustment to the designated route within the designated corridor, the Company will file:

- a. Certification and supporting documentation affirming that construction activities will be within the designated corridor, will not affect any known exclusion or avoidance areas within the designated corridor;
- b. Certification and supporting documentation, including a map meeting the requirements of N.D. Admin. Code § 69-06-04-01(2)(n) identifying the designated corridor, route and the route adjustment;
- c. Certification that Company will comply with the Commission's order, law and rules designating the corridor and route.

38. **ROUTE ADJUSTMENT WITHIN DESIGNATED CORRIDOR, AVOIDANCE AREA AFFECTED:** Before adjusting the route of an electric transmission line within the designated corridor that may affect an avoidance area, and before conducting any construction activities for any adjustment to the designated route within the designated corridor, the Company will file:

- a. A specific description of the avoidance area expected to be impacted, including a map meeting the requirements of N.D. Admin. Code § 69-06-04-01(2)(n) identifying:
  - i. the designated corridor, route and the route adjustment;
  - ii. all exclusion and avoidance areas within the portion of the designated corridor containing the route adjustment
- b. Certification and supporting documentation affirming:
  - i. That construction activities will be within the designated corridor
  - ii. That construction activities will not affect any known exclusion area
- c. All field studies performed on the portion of the designated corridor containing the route adjustment;
- d. Specific information about any mitigation measures Company will take within the adjustment area;
- e. Certification that each owner of real property on which the adjustment is to be located and any applicable governmental entity with an interest in the same adjustment area do not oppose the adjustment;
- f. Certification that unless the Commission previously authorized the impact to the same avoidance area, that the utility has good cause and a specific reason to impact the avoidance area and a reasonable alternative does not exist;
- g. Certification that Company will comply with the Commission's order, law and rules designating the corridor and route.

39. **ROUTE ADJUSTMENT OUTSIDE DESIGNATED CORRIDOR, NO AVOIDANCE AREA AFFECTED:** Before adjusting the route of an electric transmission line outside the designated corridor and not affecting any exclusion and avoidance area, before conducting any construction activities for any adjustment to the designated route outside the designated corridor, the Company will file:

- a. Certification and supporting documentation affirming that construction activities will not affect any known exclusion or avoidance areas,
- b. Certification and supporting documents stating the length of the proposed route outside of the corridor and a map meeting the requirements of N.D. Admin. Code § 69-06-04-01(2)(n) identifying the designated corridor, corridor adjustment, designated route and the route adjustment;
- c. Certification that each owner of real property on which the adjustment is to be located and any applicable governmental entity with an interest in the same adjustment area do not oppose the adjustment; and
- d. Detailed field studies indicating exclusion and avoidance areas for the proposed adjustment area; and
- e. Certification that Company will comply with the Commission's order, law and rules designating the corridor and route.

40. **ROUTE ADJUSTMENT OUTSIDE DESIGNATED CORRIDOR, AVOIDANCE AREA AFFECTED:** Before adjusting the route of an electric transmission line outside the designated corridor that may affect an avoidance area, and before conducting any construction activities for any adjustment to the designated route outside the designated corridor, the Company will file:

- a. A specific description of the avoidance area expected to be impacted, including a map meeting the requirements of N.D. Admin. Code § 69-06-04-01(2)(n) identifying:
  - i. the designated corridor, corridor adjustment, route and the route adjustment;
  - ii. all exclusion and avoidance areas within the adjustment area
- b. Certification that construction activities will not affect any known exclusion area;
- c. Certification that the utility has good cause and a specific reason to impact the avoidance area and a reasonable alternative does not exist within the designated corridor and route;
- d. Certification that each owner of real property on which the adjustment is to be located and any applicable governmental entity with an interest in the same adjustment area do not oppose the adjustment;
- e. Provide specific information about any mitigation measures Company will take within the adjustment area;
- f. Detailed field studies indicating exclusion and avoidance areas for the proposed adjustment area; and

g. Certification that Company will comply with the Commission's order, law and rules designating the corridor and route.

Company acknowledges and agrees that:

41. When applicable, Company may submit the field studies from the original application for the corridor and route provided they cover the adjustment area.
42. Company acknowledges and agrees that written authorization from the Commission for impacting the avoidance area is necessary prior to commencement of construction activity.

Dated this 19<sup>th</sup> day of February, 2019.

AURORA WIND PROJECT, LLC

By: 

Matthew F. Gilhousen

Its: Vice President

**STATE OF NORTH DAKOTA**  
**PUBLIC SERVICE COMMISSION**

**Aurora Wind Project, LLC**  
**345 kV Transmission Line – Williams and Mountrail**  
**Siting Application**

**Case No. PU-18-351**

**Tree and Shrub Mitigation Specifications**

**Inventory**

1. Trees and shrubs anticipated to be cleared, including those that are considered invasive species or noxious weeds (*e.g.*, *Caragana arborescens*, *Elaeagnus angustifolia*, *Rhamnus cathartica*, *Tamarix chinensis*, *T. parviflora*, *T. ramosissima*, *Ulmus pumila*), must be inventoried before cutting. The inventory must record the location, number, and species of trees and shrubs.
2. In windbreaks, shelterbelts and other planted areas, trees or shrubs anticipated to be cleared, regardless of size, must be inventoried for replacement.
3. In native growth areas, trees anticipated to be cleared that are 1 inch diameter at breast height (dbh) or greater must be inventoried for replacement.
4. In native growth areas, shrubs anticipated to be cleared in the permanent right-of-way must be inventoried for replacement.
5. In native growth areas outside the permanent right-of-way, shrubs must be cut flush with the surface of the ground, taking care to leave the naturally occurring seed bank and root stock intact. If soil disturbance is necessary, the native topsoil must be preserved and replaced after construction. Shrubs must be allowed to regenerate naturally where native topsoil is preserved and replaced. Where native topsoil is not preserved and replaced, shrubs anticipated to be cleared must be inventoried for replacement.
6. In native growth areas, trees and shrubs may be inventoried by actual count or by a sampling method that will properly represent the woody vegetation

population. A sampling plan developed by the company, filed with the North Dakota Public Service Commission (Commission) and approved prior to the start of construction must define the sampling method to be used for trees, for tall shrubs and for low shrubs. The data from the sample plots must be extrapolated to the total acreage of the wooded area to be cleared to determine the species and quantity of trees and shrubs to be replaced.

### **Clearing for Construction**

7. Trees and shrubs must be selectively cleared, leaving mature trees and shrubs intact where practical.
8. The maximum width of clear cuts through windbreaks, shelterbelts and all other wooded areas is 50 feet, unless otherwise approved by the Commission.
9. If the area of trees or shrubs actually cleared differs from the area inventoried, the difference in number of trees and shrubs to be replaced must be noted on the inventory.

### **Replacement**

10. Prior to tree and shrub replacement, documentation identifying the number and variety of trees and shrubs removed, as well as the mitigation plan for the proposed number, variety, type, location and date of replacement plantings, must be filed with and approved by the Commission.
11. Two 2-year-old saplings must be planted for every one tree removed. Two shrubs (stem cuttings) must be planted for every one shrub removed.
12. Except in the case of invasive or noxious species, trees and shrubs must be replaced by the same species or similar species, suitable for North Dakota growing conditions as recommended by the North Dakota Forest Service. Invasive or noxious species must be replaced by similar non-invasive or non-

noxious species suitable for North Dakota growing conditions as recommended by the North Dakota Forest Service.

13. Tree and shrub replacement must not be conducted within a 20 to 30 foot wide path over the pipeline to facilitate visual inspections of the right-of-way in accordance with U.S. Department of Transportation safety regulations.
14. Landowners must be given the option of having replacement trees and shrubs planted on the landowner's property, either on or off the right-of-way. The landowner must also be given the opportunity to waive those options in writing in order to have replacement trees and shrubs planted off the landowner's property.
15. At the conclusion of the project, documentation identifying the actual number, variety, type, location and date of the replacement plantings must be filed with the Commission.
16. Tree and shrub replacements must be inspected annually, in September, for three years. The first annual inspection must be at least one year from the anniversary date of the original plantings. A report of each annual inspection must be submitted to the Commission by October 1 of each year, documenting the condition of plantings and any woodlands work completed as of September of each year. If after the third annual report the survival rate is less than 75%, the Commission may order additional planting(s).